

Abstract

In an exhaust aftertreatment system, which includes a nonthermal
5 plasma discharge device followed by a NOx storage device followed by a precious
metal catalyst, a method is disclosed for operating the engine at a lean air-fuel
ratio when the NOx storage device is not full and for operating the engine rich
when the NOx storage device is substantially full. Electrical energy supplied to
the nonthermal plasma discharge device during lean operation is discontinued
10 during rich operation of the engine.